

REMARKS/ARGUMENTS

Claims 1-38 are pending in the instant application; claims 22-38 have been withdrawn from consideration. Claims 1-21 are currently under consideration and stand rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent No. 6,239,871 to Gilby. These rejections are respectfully traversed.

Claims 1-21 have been rejected under 35 U.S.C. § 102(e) for, in the Examiner's view, they are "clearly anticipated by Gilby (6,239,871)". Specifically, the Examiner states, "Gilby teaches of an optical analysis chamber comprising an optically transmissive elongated tubular body (112) having an interior and exterior surface wherein the interior surface of the tubular body is the exterior surface of the cell (116), wherein said interior surface wall defines an elongate separation chamber that is in direct contact with a sample material, said body wall having a window (100) having a substantially convex exterior surface wherein said window has a non uniform thickness (figure 2A) and wherein the longitudinal axis of the sample passageway is offset from the tubular body."

Applicants respectfully disagree with Examiner's interpretation of Gilby. Applicants believe that the rejection is improper and should be withdrawn.

In an effort to timely advance the application, an interview with the Examiner was requested by Applicants' representatives. Applicants are grateful that the Examiner granted and conducted the interview with Applicants' representatives on August 19, 2004. Applicants thank the Examiner for her indication that Figure 4 appears to overcome the prior art.

The present invention claims an optical analysis chamber, comprising an optically transmissive elongate tubular body having an elongate tubular body wall including an interior surface and an exterior surface. The interior surface of the body wall defines an elongate separation chamber that is **in direct contact with a sample material being analyzed**. The body wall includes an optically transmissive window having a substantially convex exterior surface portion through which optical radiation passes. The window also has a non-uniform thickness about the separation chamber selected so as to optimize optical coupling for analyzing the sample material.

Applicants amend claim 1 hereinabove to clearly state that the separation chamber is in direct contact with sample material being analyzed. This clearly differentiates the current invention from that of Gilby. The amendments are fully supported by the specification and do not introduce new matter.

In contrast to the current invention, which relates to a single optical analysis chamber, the optical apparatus of Gilby comprises at least three separate elements: a hyper-hemisphere (100), a hemisphere (106), and a cell or capillary (116). The hyper-hemisphere and hemisphere each contains a groove that once mated, form a channel where the cell or capillary can be inserted into. Further, the air space (118) between the capillary and the channel is filled with an index-matched liquid or gel. (Panel 3, line 54 through Panel 4, line 51; also see Figure 2A).

It is Applicants' understanding that "for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly" (MPEP, 706.02). Applicants respectfully submit that Gilby clearly does not include each and every limitation of the claims of the present invention. Furthermore, Gilby fails to disclose, teach, or suggest the present invention. First, Gilby describes an optical apparatus that consists at least three separate parts, namely a hyper-hemisphere, a hemisphere, and a cell or capillary. (Panel 3, line 54 through Panel 4, line 51; also see Figure 2A). These elements are put together to form the optical apparatus. The current invention, in contrast, related to a single optical analysis chamber. Second, while the interior surface of the optical analysis chamber of the current invention defines an elongate separation chamber that is in direct contact with a sample material being separated, it is not the case for Gilby. In Gilby, unlike in the current invention, the sample

material being separated is contained within the bore of the cell or capillary, and thus not in contact with the interior surface of the tubular body (112).

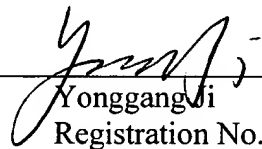
Applicants believe the above amendment and arguments also make clear that the claims of the instant invention can not be interpreted as the Examiner suggests in the “Response to Arguments” section. Namely, the claims of the invention cannot be interpreted as “the tubular body (114) having an interior and exterior surface wherein the interior surface of the body (114) is the same as the exterior surface of the cell (116), which is in contact with the material”. As stated earlier, the interior surface of the instant optical analysis chamber defines an elongate separation chamber. The chamber formed by the mated grooves in Gilby, on the other hand, defines a space to be filled by a cell or capillary, and additionally with index-matched liquid or gel. Additionally, in Gilby, it is the bore within the cell or capillary that is in contact with the material being analyzed.

In view of the amendments and remarks hereinabove, Applicants respectfully submit that claims 1-21 of the present application are now in condition for allowance. Early and favorable action thereon is respectfully requested.

Any questions with respect to the foregoing may be directed to Applicants'
undersigned agent at the telephone number listed below.

Respectfully submitted,

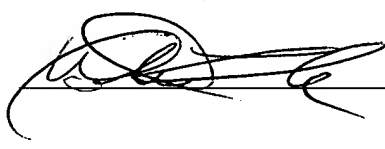
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on September 22, 2004.

Signature: 

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